Academic Writing Development of Master's Thesis Pair Writers: Negotiating Writing Identities and Strategies

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Abstract

This article provides insights into how writing a Master's thesis in pairs affects students' development and identity construction as academic writers (Burgess & Ivanič's, 2010). Data consist of self-recorded dialogues between four pairs of Danish Master's thesis writers at the start, middle and end of their thesis writing process. Data were coded thematically using grounded theory methods (Charmaz, 2006) and the resulting empirically grounded themes informed a discourse analysis of the material (Laclau & Mouffe, 2001). The findings suggest that those writing a Master's thesis in pairs negotiate and assign largely fixed writing identities at an early stage that serve as a way of creating boundaries and building trust, allowing the students to write, provide feedback and revise text in shared documents. Each pair develops a set of writing strategies focused on setting and maintaining boundaries, thereby ensuring that the joint pair writer identity is not threatened. The article discusses how this strategy is embedded in a wider Master's thesis discourse that draws heavily on concepts such as autonomy and independence and thus might not lend itself easily to the articulation of a joint identity as a writing pair.

Introduction

What writing a Master's thesis entails varies greatly internationally (Jensen, 2018). In Denmark, writing a Master's thesis is a four-month process where the student works with a self-selected topic, research question and literature. The process of writing a Master's thesis takes the form of an independent research project (there is no coursework attached) where the student has access to a limited amount of supervision. In Scandinavian higher education settings, the ideal approach to completing a Master's thesis involves a dialogue-based partnership model of supervision. Within this model, Master's thesis students are viewed as independent learners responsible for their own project (Wichmann-Hansen & Jensen, 2015; Ankersborg & Pogner, 2022; Dyste & Samara, 2006). This is partly because, in a Scandinavian context, the Master's thesis is historically linked to a discourse that values autonomy, independence and *Bildung*[1] (Jensen, 2018).

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[1] The influential concept of *Bildung* stems from a German intellectual tradition and has no direct equivalent in the English language. It can be translated as creation, image or shape and refers to individuals' personal and cultural maturation through educational formation and development and, importantly, how such maturation may help achieve visions of a better society. In this regard, education is not simply a question of mastering certain academic skills, but rather of nurturing an 'individual's spiritual and cultural sensibilities' (Dysthe, 2021, A4).

In Denmark, students can also choose to write a Master's thesis in groups or pairs.[2] The students must agree on a topic and collaborate throughout the research process, producing a single, co-authored Master's thesis. They share a supervisor and participate together in all supervision meetings. There are two formal requirements when writing a joint Master's thesis that differ from an individual Master's thesis: the first concerns the length of the thesis (which varies across study programmes); the second is that students must explicitly state who is responsible for each part of the thesis. It is a legal requirement in Denmark that students' work must be graded individually at examination – even when working with others and submitting a joint project. Writing a Master's thesis in pairs or in a group has been possible in the Humanities since 1972.[3] This option is closely linked with a broader focus in higher education on problem based learning and project work (Holgaard et al., 2021). There are considerable variations in the number of students choosing to write a Master's thesis in pairs or in groups across universities and educational programmes. However, in recent years, some educational programmes have seen a steep increase in the number of students deciding to write a Master's thesis in pairs – at one faculty, numbers quadrupled over three years (Nordentoft et al., 2020). There are several contributory factors, including the impact of higher education reforms, a renewed focus on streamlining the Master's thesis process and a rise in collective supervision formats (Nordentoft et al., 2013; Wichmann-Hansen et al., 2015).

Knowledge concerning Master's thesis writing seems to be primarily disseminated through an abundance of thesis writing handbooks that may not take into account the diversity of real-world practices (Paltridge, 2002). Existing research on the Master's thesis is primarily focused on textual analysis of the finished thesis (e.g., Samraj, 2008; Basturkmen, 2009) or on supervision practice (de Kleijn et al., 2012; Vehviläinen & Löfström, 2016). Only few studies focus on the Master's thesis writer and writing process in a wider perspective, taking into account the broader social practices and discourse on Master's thesis writing (Badenhorst et al., 2015; Ylijoki, 2001). We have not found any studies by other researchers applying such a broad perspective that focus specifically on Master's thesis writing in pairs.

However, we have previously explored the collaboration process among Danish students writing a Master's thesis in pairs. In this study, we asked four such pairs to reflect together on their collaboration at three different points during the writing process and to record these dialogues using a smartphone (Nordentoft et al., 2020). Using Bakhtinian dialogism as a theoretical prism, we explored how the pairs negotiated different voices – professional, personal and private – in their relationships with one another and with the outside world (i.e., with their supervisor, friends and family).[4] We discussed the implications of our findings for the supervision of pairs writing a Master's thesis in Denmark and for promoting a dialogue-based supervision culture, as well as the ethical implications of conducting this type of research (Nordentoft et al., 2020). The present study builds on these findings, drawing on the same data set to provide insights into another dimension of the relationship between writing pairs – namely how the writing process and the relationship with the text affect the students' development and identity construction as academic writers.

Theoretical Framework

In this paper, academic writing is broadly understood within the framework of Lea and Street's (2006) influential academic literacies model, which views academic writing as "[...] concerned with meaning making, identity, power and authority and foregrounds the institutional nature of what counts as knowledge in any particular academic context" (p. 369). Academic writing is

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[2] Writing a Master's thesis in pairs is also a known phenomenon in the other Scandinavian countries. Both in Norway and Sweden, it varies across institutions and educational programmes how many students engage in writing a joint Master's thesis.
[3] Ministerial order nr. 308 of 14 June 1972 on exams in the Humanities.
[4] Within the framework of Bakhtinian dialogism, the tension between different voices in a dialogue is seen as a driver for learning (Bakhtin, 1981).

thus a complex activity in which the dynamic between "[...] power relations among people, institutions and social identities" play a central role (Lea & Street, 2006, p. 369). The practice of academic writing shapes students' identity formation, just as the social identities available to them shape their engagement with academic writing and their identities as writers. This dynamic understanding of identity is stressed by Burgess & Ivanič (2010), who define the term *identity* as:

> [...] something that is not unitary or fixed but has multiple facets; is subject to tensions and contradictions; and is in a constant state of flux, varying from one time and one space to another. This multifaceted identity is constructed in the interaction between a person, others, and their sociocultural context. (Burgess & Ivanič, 2010, p. 232).

In the context of writing, a person is understood as comprised of at least three versions of a self: the individual's sense of self before writing, the self constructed in the process of writing and the readers' perceptions of the writer (Burgess & Ivanič, 2010). These three selves can be viewed as discursive spaces that offer different resources for identity construction. Identity as a writer is formed through negotiations within and between these discursive spaces, as well as through dialogue with others and the wider sociocultural context. Following Burgess and Ivanič (2010), we understand identity as a dynamic, flexible and relational phenomenon that is discursively constructed though a complex and never-ending process. In this article, we draw on this understanding of identity construction and multiple versions of the self to analyse how writing a Master's thesis in pairs affects students' construction of an identity as an academic writer.

Methodology

Four Master's thesis writing pairs (8 students, all female) from the Danish School of Education, Aarhus University, Denmark participated in this study. All pairs wrote their Master's thesis in L1 Danish. Guided by a set of reflective questions, each pair of writers recorded their joint reflections in Danish three times during spring 2018 while writing their thesis (at the beginning, middle and end of the writing process). These recordings were made on their personal smartphones and the audio files sent to the researchers. As such, the reflective dialogue took place without a researcher present in the students' homes and at a time of their choice. One pair did not submit their final reflection. The students were guaranteed anonymity and pseudonyms are therefore used in this article.

Table 1. Overview of self-recorded joint reflections

Writing pairs	First reflection	Second reflection	Third reflection	Total length of recorded reflections	Total transcription word count
Jeanet & Sanne	27 min.	34 min.	44 min.	105 min.	25493
Lotte & Sille	27 min.	36 min.	21 min.	84 min.	18030
Karen & Anne	16 min.	20 min.	32 min.	68 min.	14897
Irene & Maja	6 min.	7 min.	Not submitted	13 min.	2575

Students were informed of the study by their Master's thesis supervisors and were handed a brief description that included the study's objectives and the names and contact details of the researchers. If interested in participating, they were asked to give their informed consent, which they could withdraw at any point in the process.

As shown in Table 1, the length of the reflective dialogues varies considerably. It was entirely up to the students how much time they chose to engage with the reflective questions that were sent to them, and some differences are therefore to be expected. We view the differences in length among the first three pairs as within an expected range. Many factors might account for the variations: the time and setting chosen for the dialogue, whether they had plans immediately

afterwards, the loquaciousness of the students etc. However, Irene and Maja's reflective dialogues stand out. Firstly, their reflective dialogues are much shorter than the other pairs'. It is important to note that they did work their way through every reflective question (see Appendix A) in the two first reflective dialogues, but did so in a much more brief and concise manner than the other pairs. Secondly, they did not submit their final reflective dialogue, nor did they hand in their thesis on time. In some research traditions, this would have resulted in the omission of this pair, but disregarding Irene and Maja's contribution would leave out information of value to this qualitative study. It is possible that the brevity of the reflective dialogues might be a sign of underlying issues, ultimately leading to the pair's failure to hand in the final reflective dialogue.[5]

Reflective questions as prompts

Before each of their three recorded joint reflections, the students were sent a set of reflective questions (translated in Appendix A). Three overarching themes were addressed by each pair: their reasons for choosing to write a Master's thesis together; how they plan and engage in the writing process; and how they give, receive and implement feedback. The questions prompted the students' joint reflections on their collaborative writing process – a dialogue that in itself was a collaborative practice.

Critical reflections on the research design

The data set used in this study comprises self-recorded dialogues between writing pairs based on a set of reflective questions. This approach has certain limitations as it does not provide direct access to their actual actions as writers. However, we argue that the dialogue between the writing pairs can offer insight into how they conceptualize the process of writing a Master's thesis together. The chosen approach allows insight into both how they communicate with each other and their perceptions of their writing experiences and process, as well as the strategies they develop to navigate this complex task.

One possible limitation is that the pairs might find it difficult to disclose potential disagreements during the writing process, as they are highly dependent on one another to finish the Master's thesis. The chosen research design does not allow us to ask follow-up questions and get informants to expand on their reflections and any potential differences. In future studies, this might be addressed by combining reflective dialogues in pairs with interviews with the individual students after completing their thesis. The fact that only female informants volunteered to participate in the study can be seen as a potential source of bias. However, as there is a majority of women studying at the Danish School of Education, the informants can be said to be representative of the typical student at DPU in terms of sex and age. We have not explored the links between gender and writing identities among writing pairs in this study, but such a perspective might offer a fruitful line of inquiry for future studies.

Data analysis

Data analysis was carried out using grounded theory methods (Charmaz, 2006). This approach was chosen because it allows for a close empirical grounding of the analysis that is well suited to an explorative inquiry. As mentioned, we have published a previous study drawing on the same data set (Nordentoft et al., 2020). Below, we describe how that informed this study and outline the analytical process in three phases. The first phase was carried out in conjunction with the previous study, while the second and third phases are unique to this study.

In the first phase, transcripts of the reflective dialogues were coded thematically using grounded theory methods. Coding is in this context understood as a hermeneutic and comparative method drawing on a process of "joint collection and constant comparison" (Urquhart et al., 2010, p. 359; Rennie, 2000). Through an iterative process of labelling, comparing and theorizing, it offers a way to reflect on the data material. A core part of the data analysis was the production of analytical memos for each set of three reflective dialogues. Memo writing is a

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[5] It would have been interesting to gain further insight into this pair's experience, but the chosen research design did not allow for this. Participation was entirely voluntary, and we did not have the students' permission to contact them directly with follow-up questions.

key method in grounded theory as it allows for continuous inquiry and reflection on the data and is well suited to the development of conceptual categories (Charmaz, 2006). The researchers wrote individual memos as an initial step to engage with the data (three researchers were involved, including the first and second author of this paper). Based on this process and subsequent discussion of the data, three questions were chosen to guide the writing of memos to be shared as a tool to facilitate analytical discussion. These guiding questions were aligned with the reflective questions the students were sent as interview prompts (see Appendix A). The three questions were:

1. Which factors drove the writing pair's decision to write together?
2. How do they describe their relation to each other?; and
3. What do they feel they gain from writing together and how do they describe the advantages? (Are there any indications of disagreements/tensions or negotiation?)

In addition to these guiding questions, each researcher identified and reflected on key passages and themes in the memos. These memos where carefully compared and discussed by all three researchers, leading to the joint production of new memos and agreement on key themes (see Appendix B).

In the next phase of the analysis, the first author of this paper returned to the data set to explore how the writing process and the relationship with the text affected the students' development and construction of an identity as an academic writer. All the reflective dialogues and memos from the first phase were reread with a specific focus on writing as a theme. Line-by-line coding was used for all passages where the students talked about writing, and codes that could meaningfully subsume related codes were selected as focused codes (Charmaz & Thornberg, 2021).

In an iterative process, the focused codes were then mapped across the data and refined. Writing memos on the focused codes led to the development of conceptual categories. These empirically grounded conceptual categories informed a discourse analysis of the material. Laclau and Mouffe (2001) offer a perspective on discourse that encapsulates both linguistic and social practices. In their perspective, individual and collective identities are negotiated through discursive processes formed by the act of articulating equivalences and differences. Identity can be understood as identification with a particular subject position within a discursive structure; identity is therefore always relational and changeable (Laclau & Mouffe, 2001). This understanding of identities is chosen as it is highly compatible with Burgess and Ivanič's (2010) view of identities and at the same time lends itself to analytical operationalization (Jørgensen & Philips, 2002)[6]. In this study, particular attention was paid to how identities are constructed through chains of equivalence and difference.

In the final phase, the memos, conceptual categories and the analytical findings were discussed, revised and elaborated on in close collaboration between the first and second author. This step also ensured that the conceptual categories and the final analysis were sufficiently grounded in the empirical data (which the second author had also worked closely with in conjunction with our previous study – see the above description of the first analytical phase).

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[6] Laclau and Mouffe (2001) are concerned with theory development and do not provide strategies on how to operationalize their theory analytically. However, Jørgensen and Philips (2002) have suggested such strategies – for example, asking which discourses are articulated, which meanings are established and which are marginalized, and how identities are constructed through chains of equivalence and difference.

Results

Two key themes were identified concerning how the Master's thesis writing pairs planned and engaged in the writing process and how they worked with feedback. The first theme concerns how the pairs articulated their identity as writers and positioned themselves in relation to each other – and how they in this process seemed to attempt to establish fixed writing identities – both their own and that of their writing partner. This theme seemed to function as an overarching framework that has implications for all aspects of the joint pair writing process. The second theme concerns how the pair writers developed their own writing strategies to navigate the complex social and practical process of co-writing a Master's thesis. This theme provides insight into how their understanding of writing and the process of writing together affected their actual writing practice.

Constructing writing identities as individual and as pair writers
A key theme in the pair writers' dialogue was their construction of both a personal writing identity (an *I*) and a shared identity as pair writers (a *we*). The prompts for the first reflective dialogue, recorded at the very beginning of the pairs' Master's thesis process, included questions on their decision to write together, their professional and personal relationship, and their similarities and differences (see appendix A). This first reflective dialogue showed that all the pairs had prior experience writing together on several assignments; some written as part of the same larger group and some as a pair (Nordentoft et al., 2020). It was difficult to ascertain precisely how many assignments each pair had co-written as they spoke in general terms. However, it was clear from this initial reflective dialogue that they all had extensive experience writing together, and that the choice to write their Master's thesis together was closely related to these past shared experiences. The pairs also had strong social ties – one pair even lived together (Karin and Anne, see Table 2).

Table 2 shows how the eight students articulated both an individual writer identity and a shared pair writer identity at the beginning of the Master's thesis writing process evidenced in key phrases shown. Quotation marks indicate key phrases excerpted from different moments in the first reflective dialogue and translated directly. An asterisk indicates a condensed presentation of a point made in the reflective dialogue where a direct quote was not possible due to the complex nature of speech patterns in dialogue. These condensations are nevertheless based very closely on the phrasing used in the reflective dialogue. Text in parentheses is additional information provided by the authors.

Table 2. The pairs' articulation of individual and shared writing identities during their first reflective dialogue

Starting out: Articulations of identities as individual and pair writers at the start of the Master's thesis writing process		
Pair	Identities as individual writers	Pair writer identity
Jeanet & Sanne	J: 'A good starter', *good at getting ideas, 'good at producing a lot of text', 'messy', 'good at using Google search' S: 'A good closer', 'relatively bad starter', 'not someone who gets the big ideas from the start', 'not someone where ideas come naturally', *good at 'getting an overview', *good at judging the quality of text, *good at doing references, *good at revision, 'structured'	'We have different roles'
Lotte & Sille	L: 'Super good at the epistemology part', 'make it all fit together', 'good at getting things down on paper', *not a fast writer, *takes time to think and reflect	'We […] adapt to each other's differences' 'We are very effective together' We 'supplement each other'

	S: 'Good at doing the references', *writes a lot of notes on texts, *works quickly, 'very structured'	
Irene & Maja	I: 'Gets a lot of ideas', *writes a lot of text quickly M: 'Editor', 'works with templates', 'often gets blind' 'more structured'	'We are each other's opposites' They 'supplement' each other
Karin & Anne	(Do not articulate any differences between themselves as writers beyond that one reads a bit slower than the other) 'Are on the same level', 'both agree it has to be perfect'	'We complement each other' 'We are very much alike' (Live together, are best friends)

As shown in Table 2, the pairs embarked on the joint process of writing a Master's thesis with a shared understanding of who they are as individual writers and how they function together as pair writers.

The first three pairs constructed individual writing identities in opposition to each other. For example, while Sanne is a *good closer*, Jeanet is a *good starter*; Sille *works quickly* while Lotte is *not a fast writer*; and Irene *gets a lot of ideas* while Maja is the *editor*. If one of the students said something about themselves or their partner that could be perceived as negative, they were quick to point to each other's strengths as writers. Therefore, while Lotte is *not a fast writer*, she is good at taking time *to think and reflect*. Two of the pairs also include very specific skill sets in their construction of a writer identity: Sanne is *good at doing the references* whereas Jeanet is *good at using Google search*. Likewise, Lotte is *super good at the epistemology part*, whereas Sille (like Sanne) is *good at doing the references*. When the students articulated a shared pair writer identity, they constructed their individual writer identities as two puzzle pieces that, when slotted together, created a perfect whole. Irene and Maja described themselves as *each other's opposites* and stated that they *supplement each other*. Lotte and Sille also stated that they *supplement each other,* adding that they *adapt to each other's differences*. Jeanet and Sanne stated that they have *different roles* when writing together.

The articulation of the differences in writing competences and roles can be viewed as a way of supporting and justifying their decision to write together. One writer's strengths compensate for the other's weaknesses – and vice versa. By writing together, they achieve more than just being able to share the workload – they are able to construct a complete, well-rounded and robust writer identity. On one hand, this can be viewed as an appropriate strategy. Writing a Master's thesis together is a major task, and having a good sense of both one's own and each other's strengths and weaknesses is an advantage. However, the strategy also has its limitations. If the pair writers perceived success of their joint Master's thesis process hinges on the idea that they complete each other, then the differences between their individual writing competencies, areas of expertise and roles in the writing process become important. In order to articulate this shared pair writer identity at the beginning of the process of writing a Master's thesis, they had to rigorously maintain the shape of their own piece of the puzzle – otherwise the pieces would not slot together. Herein lies a paradox – in order to articulate the pair writer identity (the *we*), the students needed to pay close attention to and maintain the boundaries demarcating their individual areas of expertise (the *I*).

However, one of the four pairs, Karin and Anne, did not construct a *we* as two individual puzzle pieces that fit perfectly together. While they did use the phrase *We complement each other*, it is unclear how, as they did not articulate any differences between them as writers. The pair stressed several times how *alike* they were. They are *on the same level*, and the only minor difference between them that they mentioned was that *one reads a bit slower than the other*. In their case, the access to constructing a pair writer identity seems to be gained by an articulation of equivalence and their shared identity rooted in ideas of similitude and parity rather than

difference and complementarity. Like the other pairs, Karin and Anne were friends, but they were the only pair that also lived together and shared the same circle of friends and hobbies. Every aspect of their lives seemed enmeshed. It is possible that there was simply too much at stake for them to engage in a discourse of differences. If their collaboration on their Master's thesis had resulted in friction or conflict, it would have affected every aspect of their lives. In this perspective, any articulation of differences can be viewed as a threat to the construction of a joint pair writer identity. To avoid this threat, the students seemed to choose to discursively erase the contours of their individual selves: there simply was no *I*, only a *we*.

During their third and final reflective dialogue, the pairs looked back on their now completed Master's thesis process. The prompts for the last reflective dialogue invited the pairs to reflect on their collaboration and shared writing process (see appendix A). Karin and Anne repeatedly underlined their similarities (*we are very alike*, *we write very alike*) and again pointed to the fact that they are both perfectionists, mirroring their statements during the first reflective dialogue (see Table 2). When discussing developments and changes in their joint writing process, they said:

> A: I don't think there have been any changes in the way that we work together […]
> K: No, I do not think so either. [...]
> A: We have our habits.
> K: Yes, precisely. We know the routines.

Karin and Anne seemed to reiterate their initial articulation of their shared writing identity as a pair. Karin did state: *Writing is where I have learned something and where I have developed* with Anne adding:

> A: Both of us have developed every time (we have written together); when we had to discuss certain things, then we gained more insight into it, but not… We have done that every time we have written together.

However, this development had apparently not resulted in any changes in their habits and routines or had any implications for how they articulated their individual or shared identities as writers.

Lotte and Sille mentioned several times that writing their Master's thesis together had *worked out as expected.* In this excerpt from their reflective dialogue, they provided a bit more context:

> L. The easiest thing has been the collaboration between us because we know each other so well.
> S: Yes.
> L: We have also written together since the first semester.
> S: Yes.
> […]
> L: It has been a lot like what was to be expected.
> S: It has come along very naturally.

In their first reflective dialogue, the pair provided quite specific descriptions of themselves and each other as writers (see Table 2). As they repeatedly stated that the Master's thesis writing process had gone as they expected, it is difficult to identify changes in the way they articulated their individual and/or shared writer identities. However, Sille did state that writing with Lotte had been a learning experience:

> S: I have learned from you, because we have two different approaches, processes, and I think that that this… especially with regard to collaboration, is something I have gotten a lot out of.

In this statement, their differences are reiterated, mirroring the way they constructed their respective writing identities in the initial reflective dialogue.

Jeanet and Sanne also repeated some of the statements they had previously made about themselves and each other as writers in the first reflective dialogue (for example, Sanne stated: *you are a good starter and I am a good closer*, see Table 2). The boundaries around their individual writing identities seemed to remain constant throughout the process. The following quote from their final reflection illustrates some of the possible consequences of constructing a shared writer identity in the way described above. The pair had handed in their Master's thesis and were prompted by a question intended to shed light on any difficulties and conflicts that arose during the writing process, leading to the following exchange:

> J: There have not been many conflicts. There was that little thing with the front page.
> S: There was the day with the front page, but then that is my area of expertise.
> J. That I moved in on.
> S: That Jeanet was going to take over.
> J: […] It can become problematic when you move in on each other's [area]

Jeanet stated that there had not been many conflicts, except for what she refers to as *that little thing with the front page*. Sanne added weight to the issue, coining the phrase *the day with the front page*. She then pointed out: *but then that is my area of expertise*, as if this statement in itself was an adequate explanation for the conflict – as it seems to be for Jeanet, who seamlessly added *that I moved in on*. They seemed to have a shared understanding that each had specific areas of expertise that they had to stick to when writing their joint Master's thesis. Otherwise, it was viewed as *moving in on* or *taking over* the other's territory – as an act of aggression – with conflict the logical consequence. Jeanet concluded this exchange by drawing a more general conclusion based on *the day of the front page*, acknowledging that moving in on each other's areas *can become problematic*. It may seem odd that the pair's most significant conflict had to do with something as inconsequential as the front page of their Master's thesis. However, the significance seemed not to lie in the substance of the disagreement, but rather what they seemed to agree constituted a clear violation of established boundaries. When the boundaries surrounding their individual writer identities were challenged, so too was their construction of a joint pair writer identity. To return to the metaphor of their individual writing identities as puzzle pieces: if the shape of one of the pieces changes, the pieces will no longer fit together to form a new, complete entity.

The two strategies used to construct a shared writer identity described above can seem very different – one involves the articulation of differences and the other the articulation of equivalence. Meanwhile, both strategies rely on both parties paying very close attention to the setting and upholding of boundaries. As a result, this shared identity hinges on the articulation of and respect for individual writing identities. To maintain their joint pair writer identity, the students seemed to continuously attempt to assign each other fixed identities as writers, as opposed to Burgess and Ivanić's understanding of identity as in a state of constant flux. When the articulation of a shared writer identity requires fixed individual identities, change becomes a potential source of threat. This can represent a problematic strategy in the context of writing a Master's thesis, where students' development as writers, learners and individuals is considered a desirable outcome.

Co-development of techniques for writing together

The relational dynamic and construction of a joint pair writer identity, as described above, demarcates a space for the co-development of techniques for writing together. In this paper, a writing technique is understood as any practice, agreement or understanding intended to support the joint writing process. The presented techniques were designed to navigate both practical and emotional aspects of collaborative writing in pairs. Table 3 shows six such techniques that were mentioned across the data material (not all pairs use all the techniques). The key phrases in quotation marks are excerpted from across all the reflective dialogues and translated directly. The function of these writing techniques is shown as a summary of the students' descriptions during the reflective dialogues.

Table 3. Techniques for writing together

	Technique	Function
1	'Paste-in' document	A document where text is moved for potential later use (while both writers are aware that it will never be used again).
2	'Delete agreements'	An agreement that only the original writer can move large chunks of text to the "paste-in" document or delete text completely, even if this action has been agreed upon by both writers.
3	Working in a joint document using author-specific coloured text	Only the original writer can delete text written in "her" colour.
4	Leaving text in red if agreement cannot be achieved	The status of the red text can only be changed by mutual agreement.
5	'Brief grieving process'	A brief period of time where the writer is allowed to grieve after their text has been deleted/moved.
6	Written 'contract'	A document produced at the start of the writing process to clarify and manage expectations.

The *paste-in* document functions as an in-between space, where text can be moved if it is not used in the current draft of the Master's thesis. Both writers have to agree to move the text from the draft to the *paste-in* document. This in-between space serves several functions. Rather than being deleted, the text is archived and could potentially be retrieved for later use. This is a well-known strategy used by many writers but might provide additional value in co-writing contexts. As the value of the text is acknowledged and preserved, the writer can maintain a subject position as a 'good' writer. For the student who did not write the text (or is just not as invested in it), the *paste-in* document offered a way to remove the other's text while still acknowledging its value. There was a shared understanding between the students that even though the text could be retrieved at a later stage, this was highly unlikely. Nevertheless, the *paste in* document was successfully used by the pairs in the way described above, seemingly functioning as a valuable mediating device for negotiating conflicting perspectives and negative self-perceptions and feelings.

Delete agreements clearly stipulate that only the original writer can delete text or move it to the *paste-in* document, even if both writers agree on the action. The importance of observing this rule is illustrated by the following exchange between Lotte and Sille:

> L: The thing is to respect what the other has written – we have tried before when working in a group that some things were deleted without discussing it beforehand.
> S: Because that person just thought it was not good enough in her opinion.
> L: Yes, and we were 100 % in agreement from the get-go that we would NEVER EVER do that.
> S. Yes.
> L: Yes, because we think that is VERY disrespectful.

This shared experience of a student deleting another student's text had clearly made an impression on the pair. Jeanet and Sanne referred to the exact same thing happening in a former study group, agreeing at an early stage in their collaboration *that is not something you do*. The choice of language used by the writers when talking about *delete agreements* and their violation frames the issue as a matter of ethics; of right and wrong (see also Larsen-Ledet et al., 2019, who frame such matters in terms of territorial functioning in collaborative writing). These past experiences seemed to resonate at a deeply personal level – as if it was not just a chunk of text that had been deleted, but their access to articulating themselves as a writer.

The third and fourth writing techniques in Table 3 both involve the use of coloured text. In the first of these techniques, the writers used author-specific colours in shared documents, making

it easy to assign ownership of the text. This practice helped ensure that the important *delete agreements* could be upheld. If the writers were unable to agree on the status of a text, the second of these techniques used red text to denote a status as undecided for now (see also Hort, 2020). As such, the pair initially agreed to disagree to avoid the escalation of a potential conflict. Text in red could only be moved, deleted or rewritten with the subsequent agreement of both writers. This technique seemed to reassign passages of text from individual to joint ownership. If this passage was later moved to the *paste-in* document or deleted, then this no longer happened to an individual writer, who must move or delete text in their own font colour. The joint decision to change the colour of a particular passage to red could hereby function as a way of protecting the individual writers' subject positions as good writers, as well as softening the blow of having to discard one's own text.

No matter how many techniques the pairs used to soften the blow, deleting text still seemed to have an emotional impact on the original writer. One of the pairs coped with this using a technique they have named *the brief grieving process*, where they gave each other permission and space to experience feelings of disappointment and sorrow. Naming and setting aside a space to experience negative feelings acknowledges the emotional impact without threatening the joint pair writer identity. The final technique used by the pairs in our study involved agreeing on a *contract* at the start of the Master's thesis process to discuss and manage expectations concerning their collaboration. Three of the four pairs used this technique. Their choice of the term *contract* is likely influenced by the official term 'Master's thesis contract' in reference to a document that Master's thesis students and their thesis supervisor fill in at the very start of the Master's thesis process and which must be formally approved by the director of studies. The pairs drew on this notion of a contract to facilitate their initial discussions and negotiations of how to write a Master's thesis together.

The writing techniques described above all help navigate the complexity of the joint writing process and seemed to reduce and manage potential conflicts arising from a perceived overstepping of the boundaries that each pair so carefully maintained. The techniques appeared to be closely intertwined with a shared understanding of what might be termed *writing etiquette*; that is, what is and is not acceptable behaviour when writing with others. However, *writing ethics* might be a more accurate term considering the strength of the reactions when boundaries are overstepped and how doing so can be perceived as a direct threat to the joint pair writer identity.

Below in Table 4, the six writing techniques and their role in the complex process of Master's thesis pair writing are summed up.

Table 4. The role of the six writing techniques in Master's thesis pair writing

	Writing technique	Role in Master's thesis pair writing
1	'Paste-in' document	A mediating device for negotiating conflicting perspectives and negative self-perceptions and feelings. It offers the non-writer a way to remove the other's text while still acknowledging its value and allows for the original writer to maintain a subject position as a 'good' writer.
2	'Delete agreements'	These agreements protect the students' access to articulating themselves as writers and are viewed within in a framework of ethics.
3	Working in a joint document using author-specific coloured text	The technique helped ensure that the important 'delete agreements' could be upheld.
4	Leaving text in red if agreement cannot be achieved	The technique reassigned passages of text from individual to joint ownership, thus protecting the individual writers' subject positions as 'good' writers and avoiding the escalation of a potential conflict.

5	'Brief grieving process'	The technique acknowledges the emotional impact of having text deleted/moved to the 'paste-in' document without threatening the joint pair writer identity.
6	Written 'contract'	A facilitating device for the pairs' initial discussions and negotiations of how to write a Master's thesis together.

Discussion

In this study, we have explored how the writing process and the relationship with the text affected students writing their Master's thesis in pairs and their development and construction of an identity as an academic writer. The findings suggest that fixed writing identities were negotiated and assigned at an early stage through the articulation of either difference or equivalence (see Table 2). This process seemed to provide a basis for constructing a joint pair writer identity. As writing a Master's thesis was a both new and high stakes activity for the students, they carefully maintained their assigned identities throughout the writing process. These identities seemed to serve as a way of marking boundaries and building trust, allowing the students to write in shared documents, provide feedback and revise each other's texts. The students developed a set of writing strategies within this discursive space that focused on setting and maintaining boundaries, ensuring that the joint pair writer identity was not threatened. Their chosen approach seemed to enable them to write a Master's thesis together (all four pairs completed their Master's thesis). However, the students' perception of writing identities as largely fixed does not resonate with the dynamic and multifaceted understandings identified in previous studies (Burgess & Ivanič's, 2010) or the idea of the Master's thesis as a vehicle for learning and personal development. The strategies used to construct a joint pair writer identity may limit the students' development as writers.

This study has not included analysis of the texts produced when writing a Master's thesis – neither drafts nor the final products. Text tracking using log data and revision history analysis might have enriched our study. However, while this approach would have allowed analysis of the students' use of different techniques for writing together, some of the techniques we have described here only became apparent through the pairs' reflective dialogues on their writing process. Analysing these reflections provided insight into the meanings the students ascribed to various writing techniques and revealed how these techniques were tightly interwoven with their discursive construction of identities as writers. We therefore contend that contextual knowledge of how the pairs constructed a joint identity as writers is necessary to fully understand the function of these writing techniques. At the same time, knowledge of the writing techniques that the students used furthered our understanding of the process of constructing and articulating a joint pair writer identity.

It is also relevant to reflect on the central role played by notions of independence and autonomy in the Scandinavian discourse on the process of writing a Master's thesis. This discourse has historically produced subject positions when writing a Master's thesis that have been articulated through concepts such as individuality, seclusion and immersive study (Jensen, 2018). This can make it difficult for students writing their thesis in pairs to articulate an identity that is valued and legitimate within this discursive space. As pointed out by Ylijoki (2001), it is important to "[…] critically reflect on the kinds of stories students are living by", as well as on how these stories (or discourses) are produced by different disciplinary cultures and the role they play in the socialisation of students. There seems to be a tension between existing subject positions and the move away from a focus on the individual in the Master's thesis process. The rise in collective supervision formats and collaborative writing calls for new ways of articulating identities when writing a Master's thesis.

Our study can inform academic writing support strategies and supervision strategies when writing a Master's thesis in pairs. For example, writing pairs might be encouraged to discuss

their expectations and their understanding of writing ethics or to explore and develop their writing identities in ways that do not threaten their joint pair writer identity. This might be facilitated by drawing on discourses of play and experimentation. A contract including a set of reflective questions could be developed for this purpose, as the idea of a contract as a mediating object seems to resonate with students. This type of contract should not be shared with a supervisor as there might be tension between what the students would be comfortable sharing with each other and with a supervisor who is eventually going to mark their work.

To date, very little research has been undertaken on how students writing their Master's thesis in pairs develop and construct an identity as an academic writer. While this study does not offer a conclusive answer to this question, it contributes with findings and perspectives that have not previously been part of the academic discourse on Master's thesis writing. We hope that our study has highlighted the need for further research on Master's thesis writing in pairs and shown that this field of study might also provide more general insights into how academic writing identities are constructed.

Acknowledgments

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Appendix A: Reflective question prompts

	Research questions	**Reflection questions**
First reflection *(February)*	History and motivation • What are their reasons for deciding to write together – professionally and personally? • How does their awareness of their differences and individual preferences affect how they work together?	• Why have you chosen to write together? Did you know you wanted to write together before you started the thesis process – or was it a possibility you became aware of at the thesis workshop at the start of the writing process? • How would you describe your professional and personal relationship to each other? • How are you alike – and how are you different? • How do you work with and incorporate these differences in your collaboration process? If you can give a concrete example of this work, it would be very helpful 😊
	Process: How does the dynamic of the pair affect their development of a collaborative relationship? • How do they work to discover and integrate each other's expectations regarding the collaboration? • How do they negotiate and incorporate each writer's strengths and weaknesses? How does the pair's professional and personal knowledge of and relationship to each other impact the writing process?	*Please have a look at the questions above if you find them relevant to address when reflecting on the questions below.* • How do you organize your collaborative process? • Please give an example of how you plan your work on different sections of the thesis • How often do you meet – and where? • Which expectation do you have regarding your collaboration? • How have you made these expectations clear? • How do you divide the various tasks between you? • Have you had any disagreements regarding the questions above? • How have you previously solved disagreements or differences of opinion between you? • Which factors help strengthen your collaboration? • How do you navigate between being personal and professional in your collaboration process? • What do you most/least look forward to with regard to writing a thesis together?

Second reflection *(end of March)*	Feedback • Which factors affect how the collaboration process develops? • How do the pair organize their work and assign tasks when writing drafts for different parts of the thesis? • How do the pair give feedback on each other's drafts?	*Please have a look at the questions from your first reflection if you find them relevant when reflecting on the questions below.* • How have you been getting on since the last reflection? • Please also give an example of something that has presented a challenge in your collaborative process. • In which ways have you corrected/changed your initial plan for the writing process? • Why have you changed/not changed this plan? • How do you discuss your written drafts for the different sections of the thesis? • How do you read and give feedback on each other's drafts – and how does this process affect your collaboration? Please give a concrete example of how you give each other feedback.
Third reflection *(start/middle of May)*	The final phase of the writing process • Which factors affect how the collaboration develops? • How does the final part of the writing process differ from the two other phases?	• How have you been getting on since the last reflection? • Please give an example of what has enforced and strengthened your collaboration process. • Also, please give an example of what has challenged your collaboration process. • In which ways have you corrected/changed the plan you made for the process in the beginning? • Why have you changed/not changed the plan? • How would you characterize your collaboration in the final phase of the writing process? • Do you think it is/will be different than during the other phases – and if so, why?

Appendix B: An overview of the memo-writing proces in phase 1

1 memo	2 memo	3 memo
All the researchers read all transcripts and made very brief memos on our initial impressions. We exchanged these impressions and discussed possible themes in a meeting.	Based on our first meeting, we decided to reread the transcripts and individually answer the same overall questions we asked the informants and write memos to the three questions below: 1) Which factors drove the writing pair's decision to write together? 2) How do they describe their relationship to each other? 3) What do they feel they gain from writing together and how do they describe the advantages? (Are there any indications of disagreements/tensions or negotiation?) We did not limit ourselves to memoing on these three questions, but also included other perspectives that became apparent during rereading the transcripts.	In a second meeting we wrote a new mutual memo on top of our individual second memos. Particularly one theme appeared to be prominent: Different dimensions of the working relationship between the pairs. In the third mutual memo we developed a three-dimensional understanding of their relationship: 1) The relationship between the pair – i.e., the intersubjective dimension 2) The relationship between the pair and the outside world – i.e. the supervisor, fellow students, families and so on 3) The relationship mediated through the text – i.e. the product mediated dimension, the peer feedback process - including the relationship and identity capacity of the writing process. In a previous article we have focused on the first two dimension of the relationship. This article focuses on the third dimension, expanding on the memo writing process as described in phase 2 and 3 in the section 'Data analysis'.